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- Siegfried, W. R. (in press). Affinities of the small African and Palearctic Buteos. *Proc. Third Pan-Afr. Orn. Congr., Ostrich Suppl.*
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[In 1900 Forbes gave the University Museum of Zoology, Cambridge, some 30 land birds collected by Ogilvie-Grant and himself on Socotra. But a careful search has not revealed any buzzard.—Ed.]

## Some non-passerine bird weights from East Africa

by P. L. Britton

Received 4th April, 1970

Britton and Dowsett (1969) and Brooke (1969) together provide a full bibliography of African weight data, save for Liversidge (1968). Published data from collected birds are available for Tanzania and Uganda, but none are available for Kenya.

This paper lists 1004 weights of 223 species. The majority are from Kenya but 82 are from Tanzania and 52 from Uganda. A small series from the Omo River, southern Ethiopia (E) in June is included. Most of these weights are of specimens in the National Museum, Nairobi (to 31st July, 1969), but 220 are from the ringing schedules of the East Africa Natural History Society (to 30th June, 1969). Apart from two recent specimens, diurnal raptors in the National Museum have been ignored as their weights are included by Brown and Amadon (1968). Wintering palearctic birds are excluded, but I have deposited a list of 132 weights of 47 palearctic species (including passerines) from the National Museum collection with the B.T.O., Tring, England. I have recently ringed and weighed a large number of birds in western Kenya, but none of these data are included as I am improving my series of most species and intend to publish them at a more appropriate time.

As the weights listed were obtained by many workers, and their methods are in many cases unknown, there is a likelihood of some error. I have, therefore, omitted a few impossibly heavy or light birds, but have otherwise presented the data as they were found.

If all data for a species are from one locality it is mentioned, but it would be too complicated to mention localities in other cases. Similarly, dates are included for only a few species. Age is not mentioned except for birds in immature plumage (imm.) and juveniles (juv.), and wing-lengths (in mm) are given only for juveniles. Females with considerably enlarged ovaries are considered separately and are marked as breeding (♀ b.). Figures in parenthesis after extremes are averages, and standard deviations are included here when samples are sufficiently large. All weights are in grammes. Order and nomenclature follow White (1965).

- Podiceps ruficollis*: ♂♂ 185, 205; ♀ 150; ♀♀ b. 165, 170, 175; ♂ imm. 160; L. Naivasha.
- P. cristatus*: ♂ 960; ♀ 910; ♀ b. 920; ♀ juv. 670, wing 165; L. Naivasha.
- Pelecanus onocrotalus*: ♂♂ 11800, 12550; ♀ 12300; L. Naivasha.
- Phalacrocorax carbo*: ♀♀ 1590, 1820, 1820, 1930; L. Naivasha.
- P. africanus*: ♂ 440, L. Naivasha, Dec.
- Anhinga rufa*: ♂ 1050; ♀ b. 1130.
- Ixobrychus minutus payesii*: ♂ 71, L. Naivasha, Jan.
- I. sturmi*: ♂ imm. 142, Nairobi, May.
- Ardeola ibis*: ♂♂ 340, 370; ♀ b. 340; ♀ 290.
- Butorides striatus*: ♀ 235.
- Egretta alba*: ♂ 1110, L. Baringo, August.

- Ardea melanocephala*: ♂♂ 820, 935, 1420, 1650; ♀ 710; ♂ imm. 850.  
*A. goliath*: ♂ 4310, L. Baringo, August.  
*A. purpurea*: 880, L. Baringo.  
*Scopus umbretta*: ♀ 425, Nairobi, April.  
*Ciconia episcopus*: ♀ 1590, Tanga, April.  
*Leptoptilos crumeniferus*: ♀♀ 4820, 6700; March.  
*Ibis ibis*: ♀♀ 1190, 2325.  
*Threskiornis aethiopica*: ♂ 1530, S. Kinangop, April.  
*Platalea alba*: ♀ 1790.  
*Phoenicopterus ruber*: ♀♀ imm. 1990, 2160; L. Elementeita, Feb.  
*P. minor*: ♀ 1650; ♀ b. 1930.  
*Dendrocygna bicolor*: ♀ 840, very fat, Dec.  
*Plectropterus gambensis*: ♂ 6015, L. Naivasha, Oct.  
*Sarkidiornis melanota*: ♂♂ 1445, 1900; ♂ 2nd year, moult, 1615; L. Naivasha.  
*Nettapus auritus*: ♂ 290; ♂ imm. 225; ♀ imm. 220.  
*Anas sparsa*: ♀ 760; ♀ b. 960; March.  
*A. capensis*: 24, 382-505 (418.7 ± 35.0); L. Nakuru.  
*A. undulata*: 560, 760, 850; April.  
*A. erythrorhynchos*: ♂ 440; ♀ b. 400.  
*A. hottentota*: 32, 210-315 (251.8 ± 18.9); L. Nakuru.  
*Oxyura maccoa*: ♂ 820, L. Nakuru.  
*Thalassornis leuconotus*: ♂♂ 650, 710, 790; ♀♀ 650, 680, 765; ♀ b. 625; L. Naivasha.  
*Accipiter tachiro*: ♂ 230, Amani, July.  
*Aquila rapax*: ♀ 2150, Mtito Andei, April.  
*Falco biarmicus*: ♂ 402; ♀ 723; Nairobi.  
*Francolinus coqui*: ♂♂ 290, 300; ♂ fairly fat 305; ♀ b. 340.  
*F. sephaena*: ♂♂ 205, 310; ♀ 220; ♀ b. 240; o 290 (E).  
*F. psilolaemus*: ♀ b. 510, Mt. Kenya, June.  
*F. leucoscepus*: ♀♀ 400, 425; Isiolo, April.  
*F. squamatus*: ♀ 420, Mt. Kilimanjaro, Feb.  
*Coturnix delegorguei*: ♂♂ 72.3, 73.9, 81; ♀♀ 73, 76, 78, 91.5; ♀♀ b. 73, 94.7.  
*Ptilopachus petrosus*: ♂♂ 190, 190; Karamoja.  
*Numida meleagris*: ♂♂ 1625, 1650, 1675.  
*Acryllium vulturinum*: ♂ 1645; ♀ 1135; juv. 625, wing 218.  
*Rallus caerulescens*: ♀ 80, Kikuyu, Dec.  
*Limnocolaptes flavirostris*: ♂ 94; ♀ 75; ♀ b. 79.  
*Gallinula chloropus*: ♂ 370; ♀ imm. 250; L. Naivasha.  
*Porphyrio porphyrio*: ♂♂ 570, 680; ♀♀ 480, 510; ♀ b. 600.  
*Fulica cristata*: 10 ♂♂, 770-910 (827 ± 46.7); 10 ♀♀, 455-790 (635 ± 107); L. Naivasha. ♂♂ heavier than ♀♀ ( $P < 0.001$ ,  $t$ -test).  
*Balearica pavonina*: ♀♀ 3575, 3970.  
*Eupodotis melanogaster*: ♂ 1020, Nakuru, Dec.  
*E. bartlaubii*: ♀ 1190, Machakos, August.  
*Actophilornis africana*: ♂♂ 115, 125, 135; ♀ b. 255; L. Naivasha.  
*Dromas ardeola*: ♂♂ imm. 248, 275; ♀ 325; Mida Creek, near Malindi, April.  
*Burbinus capensis*: ♂♂ 400, 425; ♀ 413; ♀ 450 (E).  
*B. vermiculatus*: ♀ 320, Tanga, March.  
*Vanellus crassirostris*: ♂ 170; ♀ 170; Karamoja.  
*V. armatus*: 47, 138-197 (163.7 ± 11.1); L. Nakuru/L. Naivasha.  
*V. spinosus*: 6, 127-159 (148); L. Nakuru/L. Naivasha.  
*V. tectus*: ♀ b. 100, Tana River (600 m a.s.l.), May.  
*V. lugubris*: ♀ b. 100, Kilifi, April.  
*V. melanopterus*: ♂♂ 163, 170; ♀ 170.  
*V. coronatus*: ♂♂ 156, 175; ♀♀ 170, 200; ♂ imm. 150.  
*V. senegallus*: ♂ 220, Masindi, March.  
*Charadrius pecuarius*: 6 imm., 30-35 (32.3); 46, 26-36 (31.4 ± 2.1); mainly L. Nakuru.  
*C. tricollaris*: ♂♂ 28, 28, 32; ♀♀ 32, 32; ♀ b. 32; imm. 31; 8, 30-34 (31.4).  
*C. marginatus*: ♀♀ 29, 29, 31; Tanga, March/April.  
*C. pallidus*: ♂♂ 27, 27, 29, 29.5; ♀♀ 22-27 (24.8); L. Magadi.  
*Gallinago nigripennis*: 22, 93-164 (114 ± 19.4); L. Naivasha.  
*Himantopus himantopus*: ♂ 175; ♀ 160; o 143.  
*Recurvirostra avosetta*: ♂ 285; ♀ 270; ♀ o, 225-305 (266).  
*Rostratula benghalensis*: ♂ 120, Feb; ♀♀ 124 (Feb.), 135 (Nov.), 140.  
*Cursorius cursor*: ♂ 93; ♀ 107; juv. ♂ 74.5, wing 132.  
*C. temminckii*: ♂♂ 64, 65; ♀ 70; ♀ b. 71; juv. 53, wing 117.  
*C. cinctus*: ♂ 125, Archer's Post, August.

- Glareola pratincola*: ♂ 74; ♀ 73; L. Magadi.  
*Larus hemprichii*: ♂ 510; ♀ b. 400; Kilifi, April.  
*L. cirrhocephalus*: ♂ 325; ♀ imm. 320; imm. 255, 325, 355; o 320, 350.  
*Sterna bengalensis*: ♂♂ 185, 190; ♀♀ 205, 235; Kilifi, April.  
*Pterocles exustus*: ♂ 200; ♀ 175; ♀♀ b. 170, 200; Aug./Sept.  
*P. decoratus*: ♂♂ 175, 210; ♀♀ 167, 200; Kibwezi.  
*P. gutturalis*: ♂♂ 340, 345, 345; ♀♀ 285, 320, 340; ♀♀ b. 290, 380, 400; Athi Plains, August.  
*Turnix sylvatica*: ♀ 39; ♀♀ b. 49.6, 53.  
*Ortyxelos meiffrenii*: ♂♂ 15.7, 19.5; Voi, April.  
*Columba arquatrix*: ♂ 370, Limuru, Jan.  
*C. albinucha*: ♀ b. 325, July.  
*C. delegorguei*: ♀♀ b. 33, 142 (fat); Kakamega Forest, Dec.  
*Streptopelia lugens*: ♂ 140; ♀ 170; ♀ b. 175; ♂ imm. 140.  
*S. semitorquata*: ♂ 200; ♀ 178; 6 ♀♀ b., 166-200 (184.5); ♀♀ imm. 145, 145, 172.  
*S. decipiens*: ♂♂ 125, 140, 140; ♀ 125; ♀ b. 140.  
*S. vinacea*: ♂♂ 109, 111, 117, 120; ♀ 85; ♀ b. 103; Masindi.  
*S. capicola*: ♂♂ 123.6, 125, 149; ♀ b. 120; o 128.  
*S. senegalensis*: ♂♂ 76.2, 92.4, 94; ♀ 80; ♀ b. 80.  
*Oena capensis*: 6 ♂♂, 33-42 (37.7); 5 ♀♀, 32.5-39 (34.4); ♀♀ b. 35, 38; ♀ imm. 35.  
*Turtur tympanistria*: 7 ♂♂, 63.6-68.6 (66.3); ♀ 62.4- ♀ b. 60.2.  
*T. afer*: ♂ 68.8, near Sare, South Nyanza, May.  
*T. chalcospilos*: ♂♂ 55.7, 63; ♀♀ 52.5, 54.  
*Aplopelia larvata*: ♂♂ 81.7, 140; ♀♀ imm. 105, 140; imm. 124.9.  
*Treron australis*: ♂ 240; ♀♀ 180, 235, 236; ♀ b. 240.  
*Poicephalus cryptoxanthus*: ♂ 114.3, Sokoke Forest, May.  
*P. meyeri*: ♂ 165, Serengeti, Dec.  
*P. rufiventris*: ♂ 120, Kibwezi, Dec.  
*Agapornis fischeri*: ♂♂ 43, 49.  
*Tauraco schutti*: ♂ 233; ♀ 238.  
*T. livingstonii*: ♀ 249, Migori, South Nyanza, May.  
*T. fischeri*: ♂♂ 255, 261; ♀♀ 247, 283; ♀♀ b. 227, 259.  
*T. hartlaubii*: ♂♂ 200, 225, 227, 255; ♀♀ 205, 235; ♀ b. 220.  
*T. porphyreolopus*: ♀ b. 280, Yatta, near Kibwezi, March.  
*Corythaeoides personata*: ♂♂ 280, 300.  
*Crinifer zonurus*: ♀ 584; ♀ b. 480; o 450.  
*Corythaeola cristata*: ♂ 1040; ♀ 941.  
*Clamator jacobinus*: ♂♂ 70, 71; ♀♀ 80 (E), 82.2, 84 (E); ♂ imm. 62; ♀ imm. 50.5.  
*C. levallantii*: ♂ 119, Nairobi, Feb; ♂ 140, Bungoma, August.  
*Cuculus solitarius*: ♀ b. 71; juv. ♂ 52, wing 159; Nairobi.  
*C. clamosus*: ♂ 85.1, April; ♀ (large egg in oviduct) 79, May; ♂ imm. 49, Oct.  
*C. canorus gularis*: ♂ 100, Kapenguria, March.  
*Cercococcyx mebowi*: ♂ 50, Aug.; ♀ (soft egg in oviduct) 55, Sept.; Budongo Forest.  
*Chrysococcyx kelaas*: ♂♂ 19.9, 22, March; imm. 25.6; juv. 15, wing 71; o 18, April.  
*C. caprius*: 5 ♂♂, 27-29 (28.2); ♀ 35; ♀ b. 31; imm. 38.  
*Ceuthmochares aereus*: ♀ 53, Masindi, Sept.; ♀ 75, Kakamega, March.  
*Centropus toulou*: ♂ 94, Queen Elizabeth Park, Jan; ♂ imm. 125, Kisumu, June.  
*C. monachus*: ♀♀ 225, 240.  
*C. superciliosus*: ♂♂ 135, 155.2; ♀♀ 135, 170; ♀ b. 165.  
*Tyto alba*: ♂♂ 300, 320; ♀ 275; Nairobi.  
*Bubo capensis*: ♂ 1220; ♀ 1450.  
*B. africanus*: ♀♀ 730, 820.  
*B. lacteus*: ♂ 1615, Nairobi, Sept.  
*Glaucidium perlatum*: ♂♂ 73 (E), 85; ♀ 85.  
*Asio capensis*: ♂ 340; ♀♀ 305, 340, 345.  
*Caprimulgus fraenatus*: ♂ very fat 71.2, Nairobi, April; ♀ 46, Tanga, Feb.  
*C. poliocephalus*: ♂ 45; ♀♀ 48, 49; ♀ b. 49; July-October.  
*C. natalensis*: ♀ 65, Angata Baragoi, WSW of Narok, Feb.  
*C. inornatus*: ♂♂ March 46, 60; ♂ b. Ologesailie, April, extremely fat, 61.4; ♀ 54, April.  
*C. stellatus*: ♂ imm. 41, Kongelai, near Kapenguria, July.  
*C. tristigma*: ♀ 87, Moroto, Nov.  
*C. fossii*: ♂♂ 41, 41; ♂ very fat, April, 67.6; ♀♀ 35.4, 49.5 (May); ♂ imm. 41; ♀ imm. April, 48; all undated birds are July/August.  
*C. climacurus*: ♂ 38.3, March; o 45, Nov.; Uganda.  
*Macropypteryx longipennis*: ♂ 32, Masindi, March.  
*M. vexillarius*: ♂, fully developed pennants, 10 Sept., 90; ♂, no pennants, 11 April, 39; Masindi; both collected by A. C. Brooks.

[to be continued]